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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/847,172

DATE: 12/17/2001  
 TIME: 10:04:39

Input Set : A:\ES.txt  
 Output Set: N:\CRF3\12172001\I847172.raw

**ENTERED**

3 <110> APPLICANT: OREGON HEALTH AND SCIENCES UNIVERSITY  
 4 BURROWS, GREGORY G.  
 5 VANDENBARK, ARTHUR A.  
 7 <120> TITLE OF INVENTION: RECOMBINANT MHC MOLECULES USEFUL FOR MANIPULATION OF  
 ANTIGEN-SPECIFIC T-  
 8 CELLS  
 10 <130> FILE REFERENCE: 899-58137  
 12 <140> CURRENT APPLICATION NUMBER: US 09/847,172  
 13 <141> CURRENT FILING DATE: 2001-05-01  
 15 <150> PRIOR APPLICATION NUMBER: US 60/200,942  
 16 <151> PRIOR FILING DATE: 2000-05-01  
 18 <150> PRIOR APPLICATION NUMBER: US 09/153,586  
 19 <151> PRIOR FILING DATE: 1998-09-15  
 21 <150> PRIOR APPLICATION NUMBER: US 60/064,555  
 22 <151> PRIOR FILING DATE: 1997-10-10  
 24 <150> PRIOR APPLICATION NUMBER: US 60/064,552  
 25 <151> PRIOR FILING DATE: 1997-09-16  
 27 <160> NUMBER OF SEQ ID NOS: 44  
 29 <170> SOFTWARE: PatentIn version 3.1  
 31 <210> SEQ ID NO: 1  
 32 <211> LENGTH: 566  
 33 <212> TYPE: DNA  
 34 <213> ORGANISM: Rattus sp.  
 36 <220> FEATURE:  
 37 <221> NAME/KEY: CDS  
 38 <222> LOCATION: (3)..(560)  
 39 <223> OTHER INFORMATION:  
 42 <400> SEQUENCE: 1  
 43 cc atg ggc aga gac tcc cca agg gat ttc gtg tac cag ttc aag ggc 47  
 44 Met Gly Arg Asp Ser Pro Arg Asp Phe Val Tyr Gln Phe Lys Gly  
 45 1 5 10 15  
 47 ctg tgc tac tac acc aac ggg acg cag cgc ata cgg gat gtg atc aga 95  
 48 Leu Cys Tyr Tyr Asn Gly Thr Gln Arg Ile Arg Asp Val Ile Arg  
 49 20 25 30  
 51 tac atc tac aac cag gag gag tac ctg cgc tac gac agc gac gtg ggc 143  
 52 Tyr Ile Tyr Asn Gln Glu Glu Tyr Leu Arg Tyr Asp Ser Asp Val Gly  
 53 35 40 45  
 55 gag tac cgc gcg ctg acc gag ctg ggg cgg ccc tca gcc gag tac ttt 191  
 56 Glu Tyr Arg Ala Leu Thr Glu Leu Gly Arg Pro Ser Ala Glu Tyr Phe  
 57 50 55 60  
 59 aac aag cag tac ctg gag cag acg cgg gcc gag ctg gac acg gtc tgc 239  
 60 Asn Lys Gln Tyr Leu Glu Gln Thr Arg Ala Glu Leu Asp Thr Val Cys  
 61 65 70 75  
 63 aga cac aac tac gag ggg tcg gag gtc cgc acc tcc ctg cgg cgg ctt 287  
 64 Arg His Asn Tyr Glu Gly Ser Glu Val Arg Thr Ser Leu Arg Arg Leu  
 65 80 85 90 95  
 67 gga ggt caa gac gac att gag gcc gac cac gta gcc gcc tat ggt ata 335  
 68 Gly Gly Gln Asp Asp Ile Glu Ala Asp His Val Ala Ala Tyr Gly Ile

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69	100	105	110	
71	aat atg tat cag tat tat gaa tcc aga ggc cag ttc aca cat gaa ttt			383
72	Asn Met Tyr Gln Tyr Tyr Glu Ser Arg Gly Gln Phe Thr His Glu Phe			
73	115	120	125	
75	gat ggt gac gag gaa ttc tat gtg gac ttg gat aag aag gag acc atc			431
76	Asp Gly Asp Glu Glu Phe Tyr Val Asp Leu Asp Lys Lys Glu Thr Ile			
77	130	135	140	
79	tgg agg atc ccc gag ttt gga cag ctg aca agc ttt gac ccc caa ggt			479
80	Trp Arg Ile Pro Glu Phe Gly Gln Leu Thr Ser Phe Asp Pro Gln Gly			
81	145	150	155	
83	gga ctt caa aat ata gct ata ata aaa cac aat ttg gaa atc ttg atg			527
84	Gly Leu Gln Asn Ile Ala Ile Ile Lys His Asn Leu Glu Ile Leu Met			
85	160	165	170	175
87	aag agg tca aat tca acc caa gct gtc aac taa ctcgag			566
88	Lys Arg Ser Asn Ser Thr Gln Ala Val Asn			
89	180	185		
92	<210> SEQ ID NO: 2			
93	<211> LENGTH: 185			
94	<212> TYPE: PRT			
95	<213> ORGANISM: Rattus sp.			
97	<400> SEQUENCE: 2			
99	Met Gly Arg Asp Ser Pro Arg Asp Phe Val Tyr Gln Phe Lys Gly Leu			
100	1	5	10	15
103	Cys Tyr Tyr Thr Asn Gly Thr Gln Arg Ile Arg Asp Val Ile Arg Tyr			
104	20	25	30	
107	Ile Tyr Asn Gln Glu Glu Tyr Leu Arg Tyr Asp Ser Asp Val Gly Glu			
108	35	40	45	
111	Tyr Arg Ala Leu Thr Glu Leu Gly Arg Pro Ser Ala Glu Tyr Phe Asn			
112	50	55	60	
115	Lys Gln Tyr Leu Glu Gln Thr Arg Ala Glu Leu Asp Thr Val Cys Arg			
116	65	70	75	80
119	His Asn Tyr Glu Gly Ser Glu Val Arg Thr Ser Leu Arg Arg Leu Gly			
120	85	90	95	
123	Gly Gln Asp Asp Ile Glu Ala Asp His Val Ala Ala Tyr Gly Ile Asn			
124	100	105	110	
127	Met Tyr Gln Tyr Tyr Glu Ser Arg Gly Gln Phe Thr His Glu Phe Asp			
128	115	120	125	
131	Gly Asp Glu Glu Phe Tyr Val Asp Leu Asp Lys Lys Glu Thr Ile Trp			
132	130	135	140	
135	Arg Ile Pro Glu Phe Gly Gln Leu Thr Ser Phe Asp Pro Gln Gly Gly			
136	145	150	155	160
139	Leu Gln Asn Ile Ala Ile Ile Lys His Asn Leu Glu Ile Leu Met Lys			
140	165	170	175	
143	Arg Ser Asn Ser Thr Gln Ala Val Asn			
144	180	185		
147	<210> SEQ ID NO: 3			
148	<211> LENGTH: 113			
149	<212> TYPE: DNA			
150	<213> ORGANISM: Artificial Sequence			

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152 <220> FEATURE:  
153 <223> OTHER INFORMATION: Antigen/linker insert  
155 <220> FEATURE:  
156 <221> NAME/KEY: CDS  
157 <222> LOCATION: (3)..(113)  
158 <223> OTHER INFORMATION:  
161 <400> SEQUENCE: 3  
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163 Met Gly Arg Asp Ser Pro Gln Lys Ser Gln Arg Thr Gln Asp Glu  
164 1 5 10 15  
166 aac cca gtg gtg cac ttc gga ggt gga ggc tca cta gtg ccc cga ggc 95  
167 Asn Pro Val Val His Phe Gly Gly Gly Ser Leu Val Pro Arg Gly  
168 20 25 30  
170 tct gga ggt gga ggc tcc 113  
171 Ser Gly Gly Gly Ser  
172 35  
175 <210> SEQ ID NO: 4  
176 <211> LENGTH: 37  
177 <212> TYPE: PRT  
178 <213> ORGANISM: Artificial Sequence  
180 <220> FEATURE:  
181 <223> OTHER INFORMATION: Antigen/linker insert  
183 <400> SEQUENCE: 4  
185 Met Gly Arg Asp Ser Pro Gln Lys Ser Gln Arg Thr Gln Asp Glu Asn  
186 1 5 10 15  
189 Pro Val Val His Phe Gly Gly Gly Ser Leu Val Pro Arg Gly Ser  
190 20 25 30  
193 Gly Gly Gly Ser  
194 35  
197 <210> SEQ ID NO: 5  
198 <211> LENGTH: 83  
199 <212> TYPE: DNA  
200 <213> ORGANISM: Artificial Sequence  
202 <220> FEATURE:  
203 <223> OTHER INFORMATION: Alternative antigen encoding sequences for the expression  
cassett  
204 e  
206 <220> FEATURE:  
207 <221> NAME/KEY: CDS  
208 <222> LOCATION: (3)..(83)  
209 <223> OTHER INFORMATION:  
212 <400> SEQUENCE: 5  
213 cc atg ggc aga gac tcc tcc ggc aag gat tcg cat cat gcg gcg cgg 47  
214 Met Gly Arg Asp Ser Ser Gly Lys Asp Ser His His Ala Ala Arg  
215 1 5 10 15  
217 acg acc cac tac ggt gga ggt gga ggc tca cta gtg 83  
218 Thr Thr His Tyr Gly Gly Gly Ser Leu Val  
219 20 25  
222 <210> SEQ ID NO: 6  
223 <211> LENGTH: 27

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Input Set : A:\ES.txt  
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224 <212> TYPE: PRT  
 225 <213> ORGANISM: Artificial Sequence  
 227 <220> FEATURE:  
 228 <223> OTHER INFORMATION: Alternative antigen encoding sequences for the expression  
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 229       e  
 231 <400> SEQUENCE: 6  
 233 Met Gly Arg Asp Ser Ser Gly Lys Asp Ser His His Ala Ala Arg Thr  
 234            5                   10                   15  
 237 Thr His Tyr Gly Gly Gly Ser Leu Val  
 238            20                   25  
 241 <210> SEQ ID NO: 7  
 242 <211> LENGTH: 89  
 243 <212> TYPE: DNA  
 244 <213> ORGANISM: Artificial Sequence  
 246 <220> FEATURE:  
 247 <223> OTHER INFORMATION: Alternative antigen encoding sequences for the expression  
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 248       e  
 250 <220> FEATURE:  
 251 <221> NAME/KEY: CDS  
 252 <222> LOCATION: (3)..(89)  
 253 <223> OTHER INFORMATION:  
 256 <400> SEQUENCE: 7  
 257 cc atg ggc aga gac tcc aaa ctg gaa ctg cag tcc gct ctg gaa gaa           47  
 258   Met Gly Arg Asp Ser Lys Leu Glu Leu Gln Ser Ala Leu Glu Glu  
 259    1            5            10                   15  
 261 gct gaa gct tcc ctg gaa cac gga ggt gga ggc tca cta gtg           89  
 262 Ala Glu Ala Ser Leu Glu His Gly Gly Gly Ser Leu Val  
 263            20                   25  
 266 <210> SEQ ID NO: 8  
 267 <211> LENGTH: 29  
 268 <212> TYPE: PRT  
 269 <213> ORGANISM: Artificial Sequence  
 271 <220> FEATURE:  
 272 <223> OTHER INFORMATION: Alternative antigen encoding sequences for the expression  
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 273       e  
 275 <400> SEQUENCE: 8  
 277 Met Gly Arg Asp Ser Lys Leu Glu Leu Gln Ser Ala Leu Glu Glu Ala  
 278    1            5            10                   15  
 281 Glu Ala Ser Leu Glu His Gly Gly Gly Ser Leu Val  
 282            20                   25  
 285 <210> SEQ ID NO: 9  
 286 <211> LENGTH: 28  
 287 <212> TYPE: DNA  
 288 <213> ORGANISM: Artificial Sequence  
 290 <220> FEATURE:  
 291 <223> OTHER INFORMATION: PCR primer  
 293 <400> SEQUENCE: 9  
 294 aattcctcga gatggctctg cagacccc           28  
 297 <210> SEQ ID NO: 10

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Input Set : A:\ES.txt  
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298 <211> LENGTH: 30	
299 <212> TYPE: DNA	
300 <213> ORGANISM: Artificial Sequence	
302 <220> FEATURE:	
303 <223> OTHER INFORMATION: PCR primer	
305 <400> SEQUENCE: 10	
306 tcttgacctc caagccgccc cagggagggtg	30
309 <210> SEQ ID NO: 11	
310 <211> LENGTH: 31	
311 <212> TYPE: DNA	
312 <213> ORGANISM: Artificial Sequence	
314 <220> FEATURE:	
315 <223> OTHER INFORMATION: PCR primer	
317 <400> SEQUENCE: 11	
318 cggcggcttg gaggtcaaga cgacatttag g	31
321 <210> SEQ ID NO: 12	
322 <211> LENGTH: 37	
323 <212> TYPE: DNA	
324 <213> ORGANISM: Artificial Sequence	
326 <220> FEATURE:	
327 <223> OTHER INFORMATION: PCR primer	
329 <400> SEQUENCE: 12	
330 gcctcggtac cttagttgac agcttgggtt gaatttg	37
333 <210> SEQ ID NO: 13	
334 <211> LENGTH: 26	
335 <212> TYPE: DNA	
336 <213> ORGANISM: Artificial Sequence	
338 <220> FEATURE:	
339 <223> OTHER INFORMATION: PCR primer	
341 <400> SEQUENCE: 13	
342 cagggaccat gggcagagac tccccca	26
345 <210> SEQ ID NO: 14	
346 <211> LENGTH: 30	
347 <212> TYPE: DNA	
348 <213> ORGANISM: Artificial Sequence	
350 <220> FEATURE:	
351 <223> OTHER INFORMATION: PCR primer	
353 <400> SEQUENCE: 14	
354 gcctcctcga gtttagttgac agcttgggtt	30
357 <210> SEQ ID NO: 15	
358 <211> LENGTH: 128	
359 <212> TYPE: DNA	
360 <213> ORGANISM: Artificial Sequence	
362 <220> FEATURE:	
363 <223> OTHER INFORMATION: PCR primer	
365 <400> SEQUENCE: 15	
366 gaaatccgcg ggggagcctc cacctccaga gcctcggggc actagtggac ctccacacctc	60
368 gaagtgcacc actgggtct catcctgagt cctctggctc ttctgtgggg agtotctgcc	120
370 ctcagtcc	128

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/847,172

DATE: 12/17/2001  
TIME: 10:04:40

Input Set : A:\ES.txt  
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